#### REMARKS

Claims 1-38 are pending in the present application. Claims 26-38 have been withdrawn from consideration. The disclosure was objected to for the "Summary of the Invention" section being overly detailed. Claims 2, 6, 10, 17 and 21 were objected to due to informalities. Claims 1-2, 4-14 and 22-25 were rejected under 35 U.S.C. §102(b) as being anticipated by Lanni et al., U.S. Patent No. 4,621,911. Claims 1-4, 13-18 and 23-25 were rejected under 35 U.S.C. §102(e) as being anticipated by Kawano et al., U.S. Patent No. 6,597,499. Claims 3 and 15-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lanni et al. in view of Hell (EP 491 289). Claims 19-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawano et al. in view of Hell.

Claims 1, 2, 4, 6-13, 16, 17, 19, 20 and 22 have been amended. Claims 3, 5, 21 and 23-25 have been canceled. Reconsideration of the application is respectfully requested.

# Objections to the disclosure

The disclosure was objected to for the "Summary of the Invention" section being overly detailed, and for it not being defined what the terms "I2M," "I3M," "I5M," and "HBO" mean. The disclosure has now been amended to delete material from the "Summary of the Invention" section and add it to the "Detailed Description" section. The disclosure has now also been amended to change I2M, I3M and I5M to I<sup>2</sup>M, I<sup>3</sup>M and I<sup>5</sup>M and to clarify that I<sup>2</sup>M means Image Interference Microscopy, I<sup>3</sup>M means Incoherent Interference Illumination Microscopy, and I<sup>5</sup>M means a combination of Image Interference Microscopy and Incoherent Interference Illumination Microscopy, as described in Gustafsson et al., U.S. Patent No. 5,671,085, col. 5, line 31, through col. 5, line 5, cited and described in the current specification at page 2, lines 7-11. The current specification has been amended in the material moved from the "Summary of the Invention" to the "Detailed Description" section (formerly at page 7, line 3, of the specification) to indicate that the term "HBO" means mercury arc lamp, as would be known to one of ordinary skill in the art.

Withdrawal of the objections to the disclosure is respectfully requested.

# Objections to the claims

Claims 2, 6, 10, 17 and 21 were objected to due to informalities. Claim 21 has now been canceled. Claims 2, 6, 10 and 17 have now been amended to remove the informalities regarding indefiniteness and antecedent basis pointed out by the Examiner. Applicants thank the Examiner for pointing out these problems.

Withdrawal of the objections to claims 2, 6, 10, 17 and 21 is respectfully requested.

# Rejection under 35 U.S.C. §102(b) based on Lanni et al.

Claims 1-2, 4-14 and 22-25 were rejected under 35 U.S.C. §102(b) as being anticipated by Lanni et al., U.S. Patent No. 4,621,911.

Lanni et al. describes an optical microscope in which incident light 78 is reflected by a dichroic mirror 76, causing fluorescence in specimen 84, which fluorescence passes through the dichroic mirror to objective lens 90. See col. 9, lines 28-35, and Fig. 7.

Independent claim 1 of the present application, as amended, recites an interference microscope, comprising

- a first and a second objective respectively disposed on opposite sides of a specimen;
- a specimen support unit, the specimen support unit including first and second cover glasses configured to hold the specimen therebetween;

... and

- at least one detector configured to detect light reflected or induced at the coating so as to measure an intensity signal profile as a function of an axial position of the at least one coating.

It is respectfully submitted that Lanni et al. does not teach at least the above features recited in claim 1. Lanni et al. describes only a single objective 90 on one side of the specimen 84, in contrast to first and a second objective respectively disposed on opposite sides of the specimen, as recited in claim 1. Also, Lanni et al. describes dichroic mirrors 76 and glass

substrate 88 on either side of specimen 84, in contrast to first and second cover glasses configured to hold the specimen therebetween, as recited in claim 1. Additionally, Lanni et al. does not disclose at least one detector, as recited in claim 1. Because Lanni et al. is missing at least the above recited features of independent claim 1, it cannot anticipate this claim or its dependent claims.

Withdrawal of the rejection of claims 1-2, 4-14 and 22-25 under 35 U.S.C. §102(b) based on Lanni et al. is respectfully requested.

# Rejection under 35 U.S.C. § 103(a) based on Lanni et al. in view of Hell

Claims 3 and 15-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lanni et al. in view of Hell (EP 491 289). Claims 3, 15 and 21 have now been canceled.

Hell shows a detecting system 13. See Fig. 1.

It is respectfully submitted that Hell does not teach or suggest at least one detector configured to detect light reflected or induced at the coating so as to measure an intensity signal profile as a function of an axial position of the at least one coating, as recited in claim 1, from which claims 16-20 ultimately depend. Hell teaches no coating at all. And Lanni et al. does not teach or suggest a detector at all, as recited in claim 1. Therefore, it is respectfully submitted that a combination of Lanni et al. and Hell, to the extent proper, could not provide the features recited in claims 16-20.

Withdrawal of the rejection of claims 3 and 15-21 under 35 U.S.C. §103(a) based on Lanni et al. in view of Hell is respectfully requested.

#### Rejections under 35 U.S.C. §102(e), § 103(a) based on Kawano et al.

Claims 1-4, 13-18 and 23-25 were rejected under 35 U.S.C. §102(e) as being anticipated by Kawano et al., U.S. Patent No. 6,597,499. Claims 19-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawano et al. in view of Hell.

The Kawano et al. reference has an application date of January 25, 2001. The Kawano

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et al. reference thus has an effective prior art date of January 25, 2001. Applicants have claimed the benefit of the filing date of applicants' German priority application No. DE 101 00 247.5, filed on January 5, 2001. As indicated on the Office Action Summary mailed August 5, 2005, a certified copy of the priority document has been received by the Office. An English-language translation of this document is submitted herewith, along with a statement that the translation of the certified copy is accurate.

Accordingly, applicants have overcome the Kawano et al. reference by perfecting the claim to priority to an earlier filing date, 35 CFR 1.55(a)(4), and respectfully request withdrawal of the rejection to claims 1-4, 13-18 and 23-25 under 35 U.S.C. § 102(e) based on this reference. Additionally, because the Hell reference does not teach or suggest the features of claims 19-21, withdrawal of the rejection to claims 19-21 under 35 U.S.C. § 103(a) based on Hell in combination with Kawano et al. is respectfully requested.

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# **CONCLUSION**

It is respectfully submitted that the application is now in condition for allowance.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: Erik R. Swanson

Reg. No. 40,833

Davidson, Davidson & Kappel, LLC 485 Seventh Avenue, 14th Floor New York, New York 10018 (212) 736-1940